## Solid State Technology

## CUMULATIVE INDEX

ARTICLES AND AUTHORS	ISSUE	PAGE	ARTICLES AND AUTHORS	ISSUE	PAGE
Aluminum Metallization for ULSI			i-Line Stepper Technology for 16 Mbit DRAMs		
Dipankar Pramanik, Arjun N. Saxena	Mar	73	James Greeneich, Barton Katz	Mar	63
An Assessment of Silane Hazards			i-Line, 0.5 µm Lithography with a 0.45		
Vasilis M. Fthenakis, Paul D. Moskowitz	Jan	81	NA Stepper and High Performance Resist		
An Automated CNC Based Filter Tester for Fast Penetration Testing of HEPA and			Christopher F. Lyons, David T. Long,		
ULPA Media			Steve S. Miura, Robert L. Wood, Setha G. Olson	Nov	95
Edward M. Johnson, Brian R. Johnson,			Improved VLSI Device Yields through Control	1404	33
Sandra K. Herweyer, Ming-Teh Huang	Sep	113	of Implant Angle		
Applications of Scanning Probe Microscopy			Robert E. Kaim	Feb	103
in the Semiconductor Industry lan Smith, Rebecca Howland	Dec	53	In Situ Contamination Monitoring for Realtime		
ian Silin, Rebecca Howland	Dec	33	Control of Process Equipment Joseph R. Monkowski, Dean W. Freeman	Jul	S13
			In Situ End Point Control of Photoresist	our	0.0
Backsputtering Etch Studies in Wafer			Development		
Bumping Process Randy H.Y. Lo, Eddy Tijhia	Jun	91	Mariste Thomson	May	171
riandy 11.1. Lo, Lody Fiftha	Juli	31	Integrated Processing Equipment Martin E. Bader, Robert P. Hall,		
			Gregor Strasser	May	149
Candidates for Advanced Processing			Integrated Processing: Part I—Technology	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Technology at the Lawrence Berkeley Laboratory			in Transition		
Michael C. Vella	Sep	95	Nicholas O. Korolkoff Integrated Processing Part II—Cluster	Aug	73
Cluster Tool Communications: The Path to			Tool Systems		
an Open Standard			Nicholas O. Korolkoff	Oct	82
David Huntley	Nov	85	Ion Bombardment: A Determining Factor		
Conditions for Uniform Selective Epitaxial Growth			in Plasma CVD	A	100
Clifford I. Drowley, Martin L. Hammond	May	135	H.P.W. Hey, B.G. Sluijk, D.G. Hemmes Issues in Dry Cleaning of Silicon Wafers	Apr	139
Contamination Control: Problems and	,		Jerzy Ruzylio	Mar	S1
Prospects		04	,,	11100	
Takeshi Hattori	Jul	S1	MOS and CMOS as Drivers of CV Technology		
			John Skardon	Mar	93
Enhanced UHV Performance with			Magnetically Enhanced Reactive Ion Etching of		
Zirconium-Based Getters			Poly Gate Electrodes Smaller than 0.5 μm		
D'Arcy Lorimer, Edward J. Baker, Marco Succi, Daniel K. Webber	Sep	77	Son Van Nguyen, Greg Chrisman, Dave	Ont	73
Equipment Simulation: Part I	Sep	,,	Dobuzinsky, Dave Harmon Materials Analysis for the Magnetic Disk	Oct	13
J. Ignacio Ulacia F., Christoph Werner	Nov	107	Drive Industry		
Equipment Simulation: Part II	_	-	Jared T. Smith	Oct	103
J. Ignacio Ulacia F., Christoph Werner Evaluation of Dry Etch Processes with	Dec	71	Melt Growth of Large Diameter		
Thermal Waves			Semiconductors: Part I R.N. Thomas, H.M. Hobgood,		
Manfred Engelhardt	Apr	151	P.S. Ravishankar, T.T. Braggins	Mar	83
Exhaust Gas Incineration and the Combustion			Melt Growth of Large Diameter		
of Arsine and Phosphine			Semiconductors: Part II		
Brent Elliot, Frank Balma, Frederick Johnson	Jan	89	R.N. Thomas, H.M. Hobgood,	Apr	163
rederick domination	odir	00	P.S. Ravishankar, T.T. Braggins Melt Growth of Large Diameter	Api	103
			Semiconductors: Part III		
Fluoride Contamination from Fluoropolymers			R.N. Thomas, H.M. Hobgood,		
in Semiconductor Manufacture John Goodman, Susan Andrews	Jul	65	P.S. Ravishankar, T.T. Braggins	May	121
John Goodhan, Gasan Andrews	oui	00	Melt Growth of Large Diameter Semiconductors: Part IV		
			R.N. Thomas, H.M. Hobgood,		
Guidelines for Interpreting CV Data	Man	150	P.S. Ravishankar, T.T. Braggins	Jun	83
Thomas J. Mego	May	159			
			Plasma Etching of Aluminum Alloys for		
High Purity Chemical Production: Meeting			Submicron Technologies		
the Demands of ULSI	0-1	S1	L. Colombo, F. Illuzzi	Feb	95
Norbert Harder High-T <sub>c</sub> Superconducting Thin Films for	Oct	31	Plasma TEOS as an Intermetal Dielectric in		
Microwave Applications			Two Level Metal Technology Graham W. Hills, Alain S. Harrus,		
Microwave Applications Richard S. Withers, Alfredo C. Anderson,			Morgan J. Thoma	Apr	127
Daniel E. Oates	Aug	83		-	
How to Optimize and Control the Wire Bonding			Reliability Prediction: Help or Hoax?		
Process—Part I Michael Sheaffer, Lee Levine	Nov	119	Patrick D.T. O'Connor	Aug	59
Hybrid Multichip Modules Using Thick			Reliability Prediction: The Applicability of		-
Film Technology	lun	C1	High Temperature Testing	Sen	103
Daniel I Amey	11.117	5.7	HICKORY I Allen William I HOSSCH	Sen	1013

Claude Doche

Apr

## 1990 AUTHORS

Allen, Richard J	Sep 103
Amey, Daniel I	Jun S1
Anderson, Alfredo C Andrews, Susan	Aug83
Andrews, Susan	Jul65
Dadas Martin E	140
Bader, Martin E	
Baker, Edward J Balma, Frank	
Poinglace legal	Jan 72
Rlight Stanhen	Anr 175
Beinglass, Israel Blight, Stephen Borland, John O	Jan 73
Braggins, T.T.	Mar83
***************************************	.Apr163
*********************************	.May121
********************************	.Jun83
Chang, C.C.	.Feb113
Chrisman, Greg	.Oct73
Colombo, L	.Feb95
Culbertson, James C	.Apr187
Deal, B.E	lul 72
deLarios, J.M.	Jul 73
Dobuzinsky, Dave	Oct 73
Doche, Claude	Aug C1
Drowley, Clifford I	.May135
Drowley, Clifford I  Elliot, Brent  Engelhardt, Manfred	.May135 .Jan89 .Apr151
Drowley, Clifford I	.May
Drowley, Clifford I.  Elliot, Brent	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 81  Jul 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct 73
Drowley, Clifford I.  Elliot, Brent. Engelhardt, Manfred  Fair, R.B. Freeman Dean W. Fthenakis, Vasilis M.  Goodman, John Greeneich, James. Guerra, Michael  Hall, Robert P. Hammond, Martin L. Harder, Norbert. Harmon, Dave. Harrus, Alain S.	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 81  Jul 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct 73  Apr 127
Drowley, Clifford I	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct 73  Apr 127  Jul S1
Drowley, Clifford I.  Elliot, Brent	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 81  Jul 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct S1  Oct S1  Apr 127  Jul S1  Apr 139
Drowley, Clifford I.  Elliot, Brent. Engelhardt, Manfred.  Fair, R.B. Freeman Dean W. Fthenakis, Vasilis M.  Goodman, John Greeneich, James. Guerra, Michael  Hall, Robert P. Hammond, Martin L. Harder, Norbert. Harmon, Dave. Harrus, Alain S. Hattori, Takeshi. Hemmes, D.G. Herweyer, Sandra K.	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct 73  Apr 127  Jul S1  Apr 139  Sep 113
Drowley, Clifford I.  Elliot, Brent	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 81  Jul 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct S1  Oct S7  Apr 127  Jul S1  Apr 139  Sep 113  Apr 139
Drowley, Clifford I.  Elliot, Brent. Engelhardt, Manfred.  Fair, R.B. Freeman Dean W. Fthenakis, Vasilis M.  Goodman, John Greeneich, James. Guerra, Michael  Hall, Robert P. Hammond, Martin L. Harder, Norbert. Harmon, Dave. Harrus, Alain S. Hattori, Takeshi. Hemmes, D.G. Herweyer, Sandra K.	May 135  Jan 89  Apr 151  May 107  Jul S13  Jan 81  Jul 65  Mar 63  Nov 75  May 149  May 135  Oct S1  Oct S1  Oct S1  Apr 127  Jul S1  Apr 139  Apr 139

	.Apr163
***************************************	May 121
***************************************	
Hosack, Harold H	Dec 61
Houston, Theodore W	Doc 61
Howland Debases	Dec
Howland, Rebecca	
Huang, Ming-Teh	.Sep 113
Huntley, David	.Nov85
Hwang, D.M	.Feb113
-	
Illuzzi, F	Feb 95
Inam, A	Feb 113
Johnson, Brian R	Can 140
Johnson, Edward M	.Sep 113
Johnson, Frederick	.Jan89
Kaim, Robert E	.Feb 103
Kao, D.B	
Katz, Barton	
Koch, Roger H	May 255
Korolkoff Nicholas O	.Iviay255
Korolkoff Nicholas U	.Aug /3
	.Oct82
Kuehn, T.H	.Sep85
Levine. Lee	.Nov119
Levine, Lee	.Nov119
Liu, B.Y.H	.Sep85
Liu, B.Y.H Lo, Randy H.Y	.Sep85 .Jun91
Liu, B.Y.H Lo, Randy H.Y Long, David T	.Sep
Liu, B.Y.H Lo, Randy H.Y Long, David T	.Sep
Liu, B.Y.H Lo, Randy H.Y	.Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F.	Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R.	Sep 85 Jun 91 Nov 95 Sep 77 Nov 95
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R.	Sep 85 Jun 91 Nov 95 Sep 77 Nov 95
Liu, B.Y.H.  Lo, Randy H.Y.  Long, David T.  Lorimer, D'Arcy.  Lyons, Christopher F.  Marx, Daniel R.  Matsubara, S.	Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A.	Sep 85 Jun 91 Nov 95 Sep 77 Nov 95 Mar S11 Feb 113 Jul 73
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A.	Sep 85 Jun 91 Nov 95 Sep 77 Nov 95 Mar S11 Feb 113 Jul 73
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko Miura, Steve S. Miyasaka, Y.	Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F.  Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Jul         S13
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Jul         S13           Aua         65
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Jul         S13           Aua         65
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy Lyons, Christopher F.  Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D.	Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F.	Sep
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D. Murphy II, R. Garrie	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Jul         S13           Jul         S13           Aug         65           Jan         81           Mar         S11
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy Lyons, Christopher F.  Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Jul         S13           Jul         S13           Aug         65           Jan         81           Mar         S11
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F.  Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D. Murphy II, R. Garrie  Nguyen, Son Van	Sep         85           Jun         91           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Jul         S13           Aug         65           Jan         81           Mar         S11           Oct         73
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D. Murphy II, R. Garrie. Nguyen, Son Van	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Jul         S13           Aug         65           Jan         81           Mar         S11           Oct         73           Aug         59
Liu, B.Y.H.  Lo, Randy H.Y.  Long, David T.  Lorimer, D'Arcy.  Lyons, Christopher F.  Marx, Daniel R.  Matsubara, S.  McNeilly, M.A.  Mego, Thomas J.  Miura, Sadahiko.  Miura, Steve S.  Miyasaka, Y.  Monkowski, Joseph R.  Morris, Seymour F.  Moskowitz, Paul D.  Murphy II, R. Garrie  Nguyen, Son Van  O'Connor, Patrick D.T.  Oates, Daniel E.	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Aug         65           Jan         81           Mar         S11           Oct         73           Aug         68           Aug         83           Aug         83
Liu, B.Y.H. Lo, Randy H.Y. Long, David T. Lorimer, D'Arcy. Lyons, Christopher F. Marx, Daniel R. Matsubara, S. McNeilly, M.A. Mego, Thomas J. Miura, Sadahiko. Miura, Steve S. Miyasaka, Y. Monkowski, Joseph R. Morris, Seymour F. Moskowitz, Paul D. Murphy II, R. Garrie. Nguyen, Son Van	Sep         85           Jun         91           Nov         95           Sep         77           Nov         95           Mar         S11           Feb         113           Jul         73           May         159           Feb         113           Nov         95           Feb         113           Aug         65           Jan         81           Mar         S11           Oct         73           Aug         68           Aug         83           Aug         83

Pollack, Gordon P Pramanik, Dipankar	
Ramesh, R. Ravishankar, P.S. Roesch, William J. Ruggles, G.A. Ruzyllo, Jerzy.	Mar83Apr163May121Jun83Sep103May107
Saxena, Arjun N. Sheaffer, Michael Shohata, N. Skardon, John Sluijk, B.G. Smith, Ian Smith, Jared T. Strasser, Gregor Strom, Ulrich Succi, Marco	Nov
Thoma, Morgan J	Mar 83 Apr 163 May 121 Jun 83 May 171
Ulacia F., J. Ignacio	Nov107 Dec71
Vasudev, P.K Vella, Michael C Venkatesan, T	Nov61 Sep95 Feb113
Webber, Daniel K. Werner, Christoph Withers, Richard S. Wolf, Stuart A. Wood, Robert L. Wu, X.D Zhao, J.	Nov 107 Dec 71 Aug 83 Apr 187 Nov 95 Feb 113

Aug

